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(54) Title: NOVEL SEPARATION MATRIX

(57) Abstract: The present invention relates to a separation matrix comprised of ligands coupled to the surfaces of a porous support, such as one or more porous particles, wherein the ligands provide at least one chemical gradient within the support. In the most advantageous embodiment, the chemical gradient is a ligand density gradient. The invention also relates to a method of providing a separation matrix comprising ligands coupled to the surfaces of a porous support, in which method at least one ligand density gradient is provided by solvent-controlled diffusion of at least one reagent into the porous support.